Valdez, Heather

From: Valdez, Heather
Sent: Thursday, December 26, 2013 10:45 AM
To: Hedgpeth, Zach
Subject: RE: Proposed testing approach for Pogo Mine

Categories: Pogo FOIA

Hi Zach, I would support your assessment.

Heather Valdez
Chemical Engineer
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R1 (New England) RICE Website, Engine Compliance Assistance
http://epa.gov/region1/rice/

Boiler Area Source Compliance Assistance
http://www.epa.gov/boilercompliance/

Department of Energy Website on Energy Assessments
http://www1.eere.energy.gov/manufacturing/tech_deployment/energy_assessment.html

Non-Hazardous Secondary Materials
http://www.epa.gov/epawaste/nonhaz/define/index.htm

Boiler TTN Page
http://www.epa.gov/ttn/atw/boiler/boilerpg.html

RICE TTN Page
http://www.epa.gov/ttn/atw/rice/ricepg.html

Combustion Portal (compliance assistance for combustion regulations)
http://www.combustionportal.org/

From: Hedgpeth, Zach
Sent: Thursday, December 19, 2013 2:05 PM
To: Mia, Marcia; Valdez, Heather; Jones, Toni; Gallagher, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

EPA Colleagues,

I'm writing to follow up on the issue discussed in the email chain below from several months ago – specifically the waste mix averaging period for Pogo's CISWI operating parameters under 40 CFR 60.2115.
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As you will recall, prior to the initial compliance testing, Pogo was asking for a rolling 365-day averaging period for this parameter, while Region 10 was thinking that a daily average was more appropriate. In the attached "Site Specific Operating Limits Report", Pogo has proposed a rolling 3-day average based on the results of the performance testing conducted September 29 – October 2, 2013. The initial compliance testing demonstrated compliance with the applicable CISWI emission limits (except SO2) at a variety of waste mixes as described in the report. I also have the source test report as a pdf if anyone is interested.

In my opinion, the proposed 3-day average represents a reasonable averaging period as a site-specific monitoring requirement for this emission unit. Please let me know if you agree with my assessment, or if you have significant concerns regarding Pogo's proposal.

Thanks,

Zach Hedgpeth, PE
206-553-1217

From: Hedgpeth, Zach
Sent: Wednesday, September 18, 2013 7:24 AM
To: Mia, Marcia; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Yes, I agree. We've already sent this message. We can go over this again in our discussion to lay out our proposed testing approach because the issues are linked. One advantage of testing over a wide range is that it should increase their comfort level with a shorter averaging time. During our most recent call, the facility acknowledged that basically they need either a long averaging time or wide acceptable percentage ranges for the waste mix.

Zach Hedgpeth
206-553-1217

From: Mia, Marcia
Sent: Wednesday, September 18, 2013 7:19 AM
To: Hedgpeth, Zach; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Okay but I still think we need to anticipate that we are way apart on that – they want a year and we have suggested the time of the performance test. Given the waste variability and your points below, I think its reasonable to expect that they will not be able to meet a daily limit for waste mix, so we need to be thinking about what we can be comfortable with.

I think you are suggesting that depending on the test results variability based on waste mix, after the performance test we will be in a better position to know what that is. But I think you should let them know up front that *a year is a non starter for us*.

M

Marcia B Mia
Air Branch/MAMPD
Office of Compliance
Mail Code 2223A
202-564-7042

From: Hedgpeth, Zach
Sent: Wednesday, September 18, 2013 10:12 AM
To: Mia, Marcia; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Yes, Region 10 is of the opinion that the averaging time for the waste mix operating parameter can be set following the initial performance test (so that the test results can be considered).

From: Mia, Marcia
Sent: Wednesday, September 18, 2013 7:07 AM
To: Hedgpeth, Zach; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

I am okay with you talking to them – but can you clarify where we are on the averaging time?

Marcia B Mia
Air Branch/MAMPD
Office of Compliance
Mail Code 2223A
202-564-7042

From: Hedgpeth, Zach
Sent: Wednesday, September 18, 2013 9:58 AM
To: Valdez, Heather; Mia, Marcia; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

EPA Colleagues,

Given that we have received no significant adverse opinions regarding the testing approach proposal described in the email string below, Region 10 is planning to discuss this approach with the facility as soon as this afternoon, Pacific time. The call is yet to be scheduled.

Please let me know ASAP if you have any significant concerns, and sincere thanks to those who have reviewed and commented!

Zach Hedgpeth
206-553-1217

From: Hedgpeth, Zach
Sent: Monday, September 16, 2013 12:03 PM
To: Valdez, Heather; Mia, Marcia; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

If the waste production was at all predictable, this might be a workable approach. However, Pogo has told us that the wastewater sludge and oily absorb waste streams are basically completely unpredictable. The data submitted appears to support this assertion. This is what led Stef and I to propose a testing approach that will evaluate emissions at a wide

range of waste mixes. According to Pogo, there is no way to determine or control whether the sludge content on any one day will be 0% or 60% of the waste combusted (or anything in between).

Sorry to throw cold water on the idea…the critical thinking and energy is much appreciated! Please let us know if you think we're missing anything.

Zach Hedgpeth
206-553-1217

From: Valdez, Heather
Sent: Monday, September 16, 2013 11:41 AM
To: Mia, Marcia; Hedgpeth, Zach; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Cheryl; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Thanks Marcia, That is an idea Toni had as well for the averaging period. For example, if the composition requirements called for 50 lbs of A, and 20 lbs of B and C each, then how long would it take for them to generate that amount of waste. Then you could approximate the averaging time to be close to that amount of time. Is that what you mean by a campaign? We could approximate that with that data they had from last year.

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R10 RICE Website, Engine Compliance Assistance
http://yosemite.epa.gov/R10/airpage.nsf/Enforcement/rice_rules

Boiler Area Source Compliance Assistance
http://www.epa.gov/boilercompliance/

Department of Energy Website on Energy Assessments
http://www1.eere.energy.gov/manufacturing/tech_deployment/energy_assessment.html

Non-Hazardous Secondary Materials
http://www.epa.gov/epawaste/nonhaz/define/index.htm

Combustion Regulatory Actions
http://www.epa.gov/airquality/combustion/actions.html

Boiler TTN Page
http://www.epa.gov/ttn/atw/boiler/boilerpg.html

RICE TTN Page
http://www.epa.gov/ttn/atw/rice/ricepg.html

Combustion Portal (compliance assistance for combustion regulations)
http://www.combustionportal.org/
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From: Mia, Marcia
Sent: Monday, September 16, 2013 11:33 AM
To: Hedgpeth, Zach; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Cheryl; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Okay thanks.

And one thought on the averaging time- if they have asked for a year, and we are thinking the same span of time as perf testing (what wil that be 3 hours? Or cumulative of 12?) then I think we need to have a fall back with which we are comfortable – I imagine they will balk at such a short averaging period and may in fact have trouble meeting it, esp at the end of a run, where they may be running short of some or the other of a type of waste to meet the mixture limits. Do we have information on how long each "campaign" lasts? Perhaps that (the length of the campaign) is a workable middle ground.

Just thoughs to further the discussion.

Marcia B Mia
Air Branch/MAMPD
Office of Compliance
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202-564-7042

From: Hedgpeth, Zach
Sent: Monday, September 16, 2013 12:34 PM
To: Mia, Marcia; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Cheryl; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Marcia,

Thanks for the quick response, and good catch! Yes, I think you are right that our proposed approach would call for a lower limit on MSW of 20% under the example below. Specific limits would depend on actual tested waste mix, of course.

With respect to the MSW, the facility has two categories; Type 2 (residential garbage) and Type 3 (food waste). The petition does not include commercial garbage – that was my mistake including that term in my email below.

Pogo says the quantities of the two MSW waste streams are roughly equal over the long term. The waste log submitted along with the latest version of their petition request shows that on many days over the past year or so, the quantities of each stream have been roughly similar, although days with larger variation between MSW Types did occur. There has been no indication in written or verbal communications with the mine that they burn process waste in the incinerator.

I've attached the log data to this email in the pdf format submitted. I've also requested this data in spreadsheet format and expect to receive it in the next couple days. I'm happy to pass on the spreadsheet and/or any other documents related to this project…just let me know.

Again, we appreciate your input, comments, and ideas!

Zach Hedgpeth
206-553-1217

From: Mia, Marcia
Sent: Monday, September 16, 2013 9:04 AM
To: Hedgpeth, Zach; Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Vetter, Cheryl; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: RE: Proposed testing approach for Pogo Mine

Doesn't the lower limit for MSW have to be 20% b.c if they burn their max oily waste and sludge they are only at 80%. In other words they always have to burn SOME MSW? Does the composition of the MSW vary as well? For ex. Is it always from the same source(s) and always made of the mix described or might the MSW also vary between food waste/residential/commerical garbage? Is the commercial garbage "garbage" or waste from the commercial operation (e.g not MSW but perhaps process waste?)

Marcia B Mia
Air Branch/MAMPD
Office of Compliance
Mail Code 2223A
202-564-7042

From: Hedgpeth, Zach
Sent: Friday, September 13, 2013 2:32 PM
To: Valdez, Heather; Jones, Toni; Venus, Shirin; Pavitt, John; Mia, Marcia; Vetter, Cheryl; Vetter, Rick; Versace, Paul; Cozzie, David
Cc: Johnson, Steffan
Subject: Proposed testing approach for Pogo Mine

Colleagues,

Stef Johnson and I would like to request your input on a proposal for the operation of the Pogo Mine incinerator during the initial compliance test scheduled to occur the week of September 30.

As we have learned via written materials submitted by the company, the waste burned in the incinerator can be broken into three categories:

1. MSW-type waste – food waste, residential/commercial garbage
2. Wastewater treatment plant sludge
3. Oily absorbent materials from spills

Based on about a year of operating data the waste composition mix burned in the incinerator can be highly variable. Data indicates that wastewater sludge made up anywhere from 0% to 61% of the waste burned in the incinerator on any given day, while the oily absorbent materials varied from 0% to 60%. We have learned from Pogo staff that both of these waste streams are extremely unpredictable, and that while the oily absorbent materials could be stored, this is not possible for the wastewater sludge due to biological degradation.

Given the variability of the waste stream, and the improbability of being able to stage three consistent batches of material to be incinerated that represent annual average operations, Stef and I propose that the incinerator be tested over a range of waste mixes in order that the test be conducted in a manner representative of the normal operation of the unit. The test schedule logistics indicate that four complete test runs can be completed for each pollutant required to be tested. As compliance may be assessed by a minimum of three sample runs (indicating that more than three are also acceptable) we recommend that these four runs be used to evaluate the incinerator over the full range of waste mixes Pogo expects to burn on a daily basis. The outer bounds of the waste composition percentage for each waste

stream for which the units emissions are in compliance with the standards will define the allowable range for future operation.

For example, the four runs may look something like this:

- Run #1 – 100% MSW
- Run #2 – 60% MSW, 20% sludge, 20% absorbs
- Run #3 – 40% MSW, 40% sludge, 20% absorbs
- Run #4 – 20% MSW, 60% sludge, 20% absorbs

If the unit passed all four test runs, the resulting operational limits would be:

- MSW – 0-100%
- Sludge – 0-60%
- Absorbs – 0-20%

Testing only at 20% oily absorbs may be appropriate given that this material could be temporarily stored. If a large spill occurred, the materials could be metered out to be burned in the incinerator over several days.

I would prefer to communicate this direction to the staff at Pogo and their testing firm ASAP in order to provide the facility sufficient time to obtain adequate quantities of waste from each category. Your prompt feedback and input is appreciated!

Zach Hedgpeth, PE
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EPA Region 10 -- Seattle

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